IN THE SPECIFICATION:

After the title please insert the following sub-title and paragraph:

CROSS REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of PCT Application No. PCT/CH2004/000282, filed on May 10, 2004, Swiss Patent Application No. CH-836/03, filed May 13, 2003, and Swiss Patent Application No. CH-2174/03, filed December 18, 2003, the disclosures of which are herein incorporated by reference in their entirety.

Please insert the following heading prior to paragraph **[0001]**:

BACKGROUND OF THE INVENTION

Please amend paragraph **[0001]** as follows:

[0001] The invention concerns a processing device with a number of processing stations, and a processing device and advancing of mechanism for moving a succession of objects in an advancement direction ~~according to claim 1 or according to claim 2. The invention further concerns a processing device according to claim 13 as well as the use of such a processing device for the production of metal covers.~~

Please insert the following heading prior to paragraph **[0004]**:

SUMMARY OF THE INVENTION

Please amend paragraph **[0004]** as follows:

[0004] These objects are achieved by way of the processing devices according to the present invention ~~claim 1 and claim 2 as well as claim 13~~. The[[ir]] preferred use is in the making of metal covers ~~is that according to claim 16~~. By way of the processing devices of the invention precision in the cover processing can be increased. It achieves a secure adherence of the heat sealing foil of the cover and

thereby a smaller number of rejects in the carrying out of the cover production. It produces further the possibility of increasing the production speed.

Please insert the following heading prior to paragraph **[0005]**:

BRIEF DESCRIPTION OF DRAWINGS

Please insert the following heading prior to paragraph **[0014]**:

DESCRIPTION OF PREFERRED EMBODIMENTS

Please amend paragraph **[0014]** as follows:

[0014] The state of the art concerning a processing device for the production of metal covers with tear away foils will now be explained briefly with the aid of Figs. 1-9. Fig. 1 shows a schematic side view of such a device 1, which on a machine frame 2 has several processing stations 3-9. An advancing mechanism 10, 13, 14, advances objects in the advancement direction, indicated by the arrow C, from the beginning of the apparatus at the stack 11 to the end of the apparatus, where the objects become deposited in receiving bins 16 or 17 by way of chutes. The objects are removed from the stack 11 in a known way and moved onto the advancement mechanism. This advancement mechanism has 2 elongated bars 10 respectively arranged laterally on the objects, which bars lift objects lying on holders 10' at stations 3-9 upon the lifting of the bars 10 by means of the drive 14 upwardly in the direction A and then displace them by a forward movement in the direction of the arrows B (directed in the same direction as the arrow C) by way of the crank drive 13 by a given forward amount. Thereafter the bars are moved downwardly in the direction of the arrows A whereby the objects are again moved to their positions of being held by holders. The rods 10 are then moved downwardly beneath the held positions of the objects in the arrow direction B and are then moved rearwardly oppositely to the arrow C, and thereafter the described process is carried out anew. The objects between their transport rest at their holder positions and are thereby at the processing stations and are there processed. After one processing step of all the processing stations a new advancement takes place. Fig. 3 shows stacked metal

cover ~~banks~~blanks 20 as an example of objects, which are on hand in the stack 11. These blanks 20 are, for example, round metal disks of, for example, 11 cm. diameter. Obviously, other basic shapes, for example, rectangular or square disks and other diameters are possible. The blanks 20 are already pre-formed, in a non-illustrated processing device, at their edges as shown in Fig. 3. In Fig. 3, and in each of the subsequent figures, only a section of an entire disk is shown in order to simplify the drawing. In the first processing station 3 of Fig. 1 by a stamping process using upper and lower work tools an opening is stamped in the disk, which is visible in Fig. 4, in which a figure the edge of the opening is indicated at 21 and the stamped out round disk is indicated at 27. This disk 27 falls as waste into the container 12 of Fig. 1. The stamping processing station 3 is driven by a drive 15, which will be explained in more detail. At the processing station 14 a drawing of the edge 21 downwardly takes place whereby the development of the edge to that as shown in Fig. 5 takes place. The circularly shaped cover blank 20 moves then to the processing station 5, in which a foil 25 is placed over the opening of the cover 20 and is there fastened to the cover by way of heat sealing, as is to be seen in Figs. 6 and 7. The metal foil 25 is provided in a known way with a plastic film on its underside. The needed round foil blank 25 as a rule is stamped in station 5 from a wide foil web and is placed over the middle aperture of the circularly shaped disk and by way of the heat sealing station the foil under the effect of heat is pressed onto the round aperture of the part 20 so that the foil 25 is connected to the metal cover 20 by the melting and subsequent cooling of the plastic layer. This is known and is not described in further detail here. In any event, for cooling a cooling processing station 7 can be provided. In the processing station 8 the foil 25 is provided with a coining processing, and the edge 22 is further flanged into the finished edge 23. In a station likewise indicated as a processing station 9 the finished cover is now subjected to an inspection, which in general includes a sealing ability test for the tear off foil 25 applied to the cover. If the foil is found to be tightly sealingly fastened to the remainder of the metal cover, the cover moves into the receiver 16 for the finished covers. If an untight sealing condition is found, the cover moves by way of the other illustrated chute into the waste container 17. According to the state of the art, several covers arranged perpendicularly to the advancement direction are simultaneously processed at each processing station. Fig. 2 shows this for the stamping processing station 3, wherein a known stamping device is illustrated. This device includes four supporting columns 32, of which those located behind the illustrated supporting columns in the viewing

direction are not visible. Arranged on these supporting columns are the upper work tool carrier 31 and the lower work tool carrier 30, which respectively carry the upper stamping tools 36 and the lower stamping tools 37. These stamping tools are multiple tools, so that in the illustrated example four covers are stamped at the same time. The upper or the lower work tool carrier is driven for carrying out the stamping motion, and in Fig. 2 the motion is that of the lower work tool holder 30 which shown to be driven by the drive 15, which drive consists of a drive motor 18 and an eccentric shaft 19, which by way of push rods 34, 35 move the lower work tool carrier up and down under the guiding of the columns 32. To increase the number of covers produced, the width of the processing device can be increased so that therefore the stamping processing station 3 of Fig. 2, for example, processes six or eight covers simultaneously with a more multiple work tools instead of the illustrated four covers. Attempts to increase the number of covers stamped per unit of time can also be made by increasing the number of reciprocating strokes of the stamping station per unit of time and correspondingly the cadence of the further processing stations. An increase of the reciprocating rate is opposed by the considerable masses of the processing stations. With a widening of the processing stations, there results an accompanying bending of the work tool carriers 30 and 31 because of the high stamping forces, which bending is indicated by the curved lines D. This necessitates a correspondingly more stable design of the work tool carriers and results again in considerably larger masses. It has been shown that the tight sealing of the tear-off foil 25 onto the cover part 20 is very strongly dependant on the quality of the stamping in the processing station 3. Even a slight increase in the bending of a work tool carrier can lead to bad sealing of the finished covers.

Please amend paragraph **[0015]** as follows:

[0015] Figs. 10 and 11 now show a first embodiment of a processing device according to the invention. In it, as the preferred example, the object processing is carried out with basically the same method steps as in the processing of a cover according to Figs. 3-9. On a frame 2 are arranged the processing stations 43 to 50. An advancement mechanism 52 again transports the cover parts to be processed stepwise in the advancement direction C through the processing stations, so that the advancement mechanism can basically be an advancement mechanism

corresponding to the described state of the art. Preferably, however, the advancement mechanism 52 has another form, namely a belt shaped form, which in the following will be described in more detail. The cover parts 20 of Fig. 3 are arranged in a stack 41 and are basically moved from the stack and onto the advancement mechanism in a known way. The first processing station 43 again stamps the opening in the disks 20 and thereby stamps out the plates 27. These plates move into the waste container 42. A drive 45' drives the stamping station. Fig. 11 now shows a front view of one embodiment of a processing station, as an example of the stamping station 43, according to the invention. This has functionally separate units for the the stamping station. Therefore, there are in the example three units 43a, 43b, and 43c shown next to one another, each of which processes only one cover, so that in the illustrated example perpendicularly to the advancement direction three covers are simultaneously processed. Each unit 43a, 43b, 43c is functionally so independent of the other units that the bending forces arising from the processing in the processing station, and for example the stamping processing station, have no or only insubstantial effect on the other processing stations. In the example of Fig. 11, each processing station is therefore an entirely separate unit; each of which for itself alone has four columns 56, 57 for the upper work tool carrier 54 with the work tool 58 for one cover, and for the lower work tool carrier 55 with the lower work tool 59 for only one cover. A drive 45' with a motor 48' and eccentric 49' work on the lower work tool holder 55 through a push rod 63. Obviously this holder can also be stationary and the upper work tool holder 54 can be moved up and down. Next to the mentioned parts of the illustrated unit of the processing station 43a, is a further unit 43b illustrated only as a rectangular box and a further unit 43c likewise illustrated as a rectangular box. These units are basically constructed identically to the described first unit 43a. It is to be seen that with this construction of a processing station the bending even in the case of a relatively low mass construction can be held to be very small, and especially because of the functional independence of the other units the bending is independent of how many units are placed next to one another. Instead of the illustrated three units, which permit the processing of three covers simultaneously, obviously any desired number of units can be placed next to one another. For example, six units or also eight units. This increase in the number of units does not increase the bending of the individual work tool carriers at all, so that the processing precision remains the same even in the case of simultaneously processing a large number of objects or covers. Obviously, the

work tool holders and the units which lie next to one another can also be coupled, as is indicated by the lines 60. In this case, the functional separation of the units in respect to their bending relationships is not made poorer. Instead of a separate drive 45' for each of the units a common drive for the individually driven work tool carriers 55 of all of the units can be provided, or a group of individual units can be provided with a common drive.

Please amend paragraph **[0017]** as follows:

[0017] In Fig. 10 the further processing stations can be implemented likewise in the way portrayed by the stamping station according to Fig. 11 or Fig. 12 as functionally separate units of individual work tool processing stations or processing stations with groups of work tools. The processing station 44 is therefore in this case one in which the drawing of the edge 22 in accordance with Fig. 5 is carried out. The processing station illustrated in Fig. 10 shows a variant, in which precut cover foils are arranged in a stack [[45]] 41 and are individually taken from the stack and laid onto a cover part and are possibly pre-supplied with adhesive to fix them for further transport. In this station 45, however, a foil stamping work tool can also be provided which stamps the foil part 25 directly from a large foil web and adheres it to the cover part, for example, by point or ~~area-wise~~areawise heat application. Also the station 45 is, as mentioned, implemented as an individual work tool station or as a station with groups of work tools which are functionally separate from one another.

Please amend paragraph **[0018]** as follows:

[0018] The station [[26]] 46 can be a heating station which possibly is intelligent. Advantageously, such a heating station operates in a non-contacting manner by using, for example, induction or infrared radiation, with the result that its simple mechanical implementation supports high repetition rates.